FSB NPR 7150.2 Compliance Matrix (582-2008-004) - Version History

1.0   3/3/2008   Initial version - corresponds to FSB NPR 7150.2 Compliance Guideline version 1.0

Instructions for Using this Matrix Template

(1)   Most Flight Software is classified as Class B - the template is set up for this situation by default.
          If your software has been classified as Class C (unusual for FSW), hide the "Class B" column, and unhide the "Class C" column.

(2)   Examine the companion document: FSB NPR 7150.2 Compliance Guideline (582-2008-003) from the point of view of your team and its practices.
                    o The Guideline has the details of how FSB complies with the NPR requirements.
                    o This matrix is a summary of your team's compliance, suitable for presentation at reviews.

(3)   The review panel will expect to see compliance with ALL 7150.2 requirements (i.e., YES to everything):
                    o If you have practices that differ significantly from the FSB Guideline, but still meet the spirit of the NPR requirement,
                       then leave the compliance column set to "YES" and describe the compensating practice in the column provided.
                    o If you have practices that do not meet the NPR requirement, replace the YES with "NO" or "Partial" and describe the compensating
                       circumstances (if any) in the final column. You should expect questions from the review panel.
                    o Review the matrix with FSB Management if you have tagged any items as "NO" or "Partial"

(4)   For inclusion into a review package, rows that are shaded DARK GRAY (see the key at the end of the matrix - these items are satisfied at the Center or
          Agency level and are n/a for your team) have been hidden to save space. Be prepared for a possible question on the "missing rows".

          When you present the matrix in a review, you should explain that the details of how we comply with each NPR requirement are contained in the
          FSB NPR 7150.2 Compliance Guideline, and have a hard copy available for anyone who wants to see it.

(5)   Inclusion in PowerPoint:

          The page-breaks in the template are positioned to show the content in 4 reasonably sized pages if the Dark Gray rows are hidden.

          o Select 1 page of the matrix, from the titles down to the line above the next title.
          o Hold down the shift key and select "Copy Picture" from the Edit menu.
          o In the dialog box, check "As Shown When Printed" (not essential but improves appearance slightly).
          o Go to the PowerPoint presentation page and paste - no resizing should be necessary.
          o Repeat for each of the 4 matrix pages, and the Key page if needed.

NPR Section	Req #	Descriptor *	Class B	Compliance	Compensating Practice (if required)
Applicability and Scope	1	Effective Date	X	Yes	
Compliance with Laws, Policies and Requirements	7	SW Disclosures	Note 1	Yes	
	8	Export Control	Note 1	Yes	
	9	External Release	Note 1	Yes	
	10	Security	Note 1	Yes	
	11	Disabilities	Note 1	Yes	
	12	Disabilities	Note 1	Yes	
Software Life Cycle Planning	13	SW Plan	X	Yes	
	14	Execute Plan	X	Yes	
	15	Cost Estimation	X	Yes	
	16	Schedule	X	Yes	
	17	Training	X	Yes	
	18	Reviews	X	Yes	
	19	Life Cycle	X	Yes	
	20	SW Classification	X	Yes	
	21	SW Classification changes	X	Yes	
	22	SW Assurance	X (Note 2)	Yes	
	23	SW Safety	X	Yes	
	24	Plan Tracking	X	Yes	
	25	Corrective Action	X	Yes	
	26	Changes	X	Yes	
Commercial, Government, and Modified Off-The-Shelf Software	27	COTS, GOTS, MOTS	X	Yes	
Software Verification and Validation	28	Verification planning	X	Yes	
	29	Validation planning	X	Yes	
	30	Verification results	X	Yes	
	31	Validation results	X	Yes	

NPR Section	Req #	Descriptor *	Class B	Compliance	Compensating Practice (if required)
Project Formulation Requirements	32	CMM L3 or CMMI L2	X (Note 3)	Yes	
	33	Options for Acquisition	X	Yes	
	34	Acceptance Criteria	X	Yes	
	35	Supplier Selection	X	Yes	
	36	SW processes & tasks	X	Yes	
	37	Milestone	X	Yes	
	38	Acqusition planning	X	Yes	
Software Contract Requirements	39	Insight into test	X	Yes	
	40	Electronic access	X	Yes	
	41	Open source	X	Yes	
	42	Source code access	X	Yes	
	43	Track change request	X	Yes	
	44	SW measurement data	X	Yes	
	45	Joint audits	X	Yes	
	46	SW schedule	X	Yes	
	47	Traceability data	X	Yes	
	48	Solicitation	X	Yes	
Software Requirements	49	Document	X	Yes	
	50	SW requirements	X	Yes	
	51	Flow-down & derived req.	X	Yes	
	52	Bi-directional trace	X	Yes	
	53	Manage req. change	X	Yes	
	54	Corrective action	X	Yes	
	55	Requirements Validation	X	Yes	
Software Design	56	Document design	X	Yes	
	57	Architecture	X	Yes	
	58	Detailed design	X	Yes	
	59	Bi-directional trace	X	Yes	

NPR Section	Req #	Descriptor *	Class B	Compliance	Compensating Practice (if required)
Software Implementation	60	Design --> code	X	Yes	
	61	Coding standards	X	Yes	
	62	Unit test	X	Yes	
	63	Version Description	X	Yes	
	64	Maintain Traceability	X	Yes	
Software Testing	65	Plan, procedures, reports	X	Yes	
	66	Perform testing	X	Yes	
	67	Test for compliance	X	Yes	
	68	Evaluate test results	X	Yes	
	69	Doc. defect & track	X	Yes	
	70	Models, simulations, tools	X	Yes	
	71	Update plans & procedures	X	Yes	
	72	Maintain Traceability	X	Yes	
	73	Platform or Hi-Fidelity sim.	X	Yes	
Software Operations, Maintenance, and Retirement	74	Document maint. plans	X	Yes	
	75	Plan ops., maint. & retirement	X	Yes	
	76	Implement plans	X	Yes	
	77	Deliver software product	X	Yes	
	78	As-built documentation	X	Yes	
Software Configuration Management	79	Develop CM plan	X	Yes	
	80	Track & evaluate changes	X	Yes	
	81	Identify sw configuration items	X	Yes	
	82	Authorizing Changes	X	Yes	
	83	Maintain records	X	Yes	
	84	Configuration audits	X	Yes	
	85	Implement procedures	X	Yes	
Risk Management	86	Continuous risk management	X	Yes	

NPR Section	Req #	Descriptor *	Class B	Compliance	Compensating Practice (if required)
Peer Reviews/Inspections	87	Requirements & Test Plans	X	Yes	
	88	Checklist, criteria, & tracking	X	Yes	
	89	Basic measurements	X	Yes	
Software Measurement	90	Objectives	X	Yes	
	91	SW measurement areas	X	Yes	
	92	Collection & storage	X	Yes	
	93	Analyze data	X	Yes	
	94	Report analysis	X	Yes	
Software Plans	102	SW Development/Mgt. Plan	X	Yes	
	103	SW Configuration Mgt. Plan	P (Center)	Yes	
	104	SW Test Plan	X	Yes	
	105	SW Maintenance Plan	P (Center)	Yes	
	106	SW Assurance Plan	X	Yes	
Software Requirements and Product Data	109	SW Requirements Spec.	X	Yes	
	110	SW Data Dictionary	P (Center)	Yes	
	111	SW Design Description	X	Yes	
	112	Interface Design Description	X	Yes	
	113	SW Change Request/ Problem Report	X	Yes	
	114	SW Test Procedures	X	Yes	
	115	SW Users Manual	X	Yes	
	116	SW Version Description	X	Yes	
Software Report Requirements	117	SW Metrics Report	X	Yes	
	118	SW Test Report	X	Yes	
	119	SW Inspection/Peer Review	P (Center)	Yes	
Compliance	125	Compliance Matrix	X	Yes	

*		See Requirement in NPR for full description
		Light Grey shaded box indicates that the requirement cannot be waived by the project via the ITA (see Chapter 6)
		Dark Grey shaded box indicates that the responsibility for that requirement is not at the project level
X		Project is required to meet the requirement as written
X (not OTS)		Project is required to meet except for off-the-shelf software
P (Center)		Per Center defined process
P (project)		As defined in the project or software development plan
Blank Space		Project is not required to meet the requirement
Note 1		The scope of this requirement is contained in the source NPD or NPR
Note 2		This requirement can only be waived by the OSMA ITA
Note 3		For Class B software, in lieu of a CMM/CMMI certification by a developer, the project will conduct a software capability evaluation in the seven process area listed in SWE-032 and mitigate any risk, if deficient.